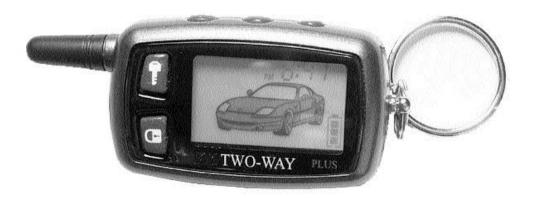


# **ASTRA 1000RS** AUTOMATIC/MANUAL TRANSMISSION REMOTE START SYSTEM PRODUCT MANUAL



### Limited Lifetime Warranty

This vehicle remote start system is warranted to the original purchaser, to be free from defects in material and workmanship. The manufacturer will repair or replace at its option, and free of charge for the first twelve (12) months, any part that proves defective in material or workmanship under normal installation, use, and service, provided the product is returned to the manufacturer freight prepaid. After the first 12 month warranty period there will be a maximum service charge of \$25.00 per calendar year (if required) for repair and/or replacement of any defective parts.

A copy of the original purchase receipt must accompany any products returned for warranty service. Warranty is limited to defective parts and/or replacement parts only and excludes any incidental, and consequential damages connected therewith.

The manufacturer of this system makes no warranty against the theft of the vehicle or its contents. This warranty is not to be construed as an insurance policy against loss.

WARRANTY OF INSTALLATION LABOR, REMOVAL AND RE-INSTALLATION CHARGES ARE NOT THE RESPONSIBILITY OF THE MANUFACTURER.

### Table of Contents

1.	About Your SystemPage 1
2.	Remote TransmittersPage 2Remote Transmitter DescriptionPage 2Adding/Replacing TransmittersPage 2Two Car OperationPage 3Battery ReplacementPage 32-Way LCD Remote Transmitter DescriptionPage 4LCD Battery ReplacementPage 5Setting The TimePage 5Setting The Alarm ClockPage 5Setting The Automatic Start Or Auto ActivationPage 5Visual IndicationsPage 6
3.	System Operation     Page 7       Remote Locking     Page 7       Remote Unlocking     Page 7       Visual Car Finder Mode     Page 7       Valet Mode     Page 7
4.	Remote Start Features     Page 8       Manual/Automatic Transmission Mode     Page 8       Remote Starting     Page 8       Shut Down     Page 8       Quick Stop     Page 9       Automatic Start Mode     Page 9
5.	Extended Features
6.	System Installation
7.	System Wiring
8. 9.	Starter Diagnostics
10.	System Programming
11.	Wiring Diagrams
12.	Door Lock DiagramsPage 18
13.	Technical Information
14. 15.	Relay Block Wiring Diagram  Page 19    System Wiring Diagram  Back Page

### About Your System

The **Astra 1000RS** is a state-of-the-art remote starting system with an integrated 2-way paging feature. With proper installation, this system will provide superior protection and performance for many years to come.

The **Astra 1000RS** built-in remote start feature is designed to offer maximum convenience by remote starting your vehicle's engine, turning on the heater/air conditioner, and then running for a pre-determined time to provide a comfortable environment once you enter your vehicle.

ScyTek Electronics Inc. and its VENDORS shall not be liable for any accident resulting from the use of this equipment. This system is designed to be professionally installed into a car or vehicle in which all items, such as parking brake and all associated components, door switches, transmission shift linkage, throttle linkage, and all engine safety features, are in perfect working condition.

DO NOT install Astra 1000RS remote starting system on MANUAL TRANSMISSION in vehicles without verifying that the system is in Manual Transmission Mode. If accidentally left in gear the vehicle could become a self-propelled threat to life and property.

DO NOT remote start the vehicle in a closed garage. Make sure that the garage door is open or there is adequate ventilation. Failure to observe this rule could result in injury or death from poisonous CarbonTo ensure the safety and security of the system while it is remote started, the Galaxy Starter employs several safeguards. In the event the brake pedal is pressed while the engine is remotely running, the remote start will immediately shutdown to prevent unauthorized users from attempting to drive the vehicle. The system is equipped with a hood pin input to prevent access to the engine compartment while the vehicle is remotely running. Finally, the Valet Mode prevents the remote start feature from operating in the event the vehicle is to be serviced.

### **System Contents:**

- Main control unit w/wiring harnesses.
- One 5-Button Random Coded TX and one 2-Way LCD Transmitter
- Status LED
- Emergency Override / Valet Switch
- 2-way window mount antenna
- System manual

#### **Options and Convenience Features\***

This ScyTek system includes several optional inputs and outputs allowing the creation of a completely personalized convenience system by offering many optional features such as:

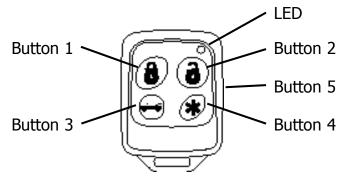
- · Second Car Operation
- · Keyless Entry
- · Power Trunk / Hatch
- Release

#### **PLEASE NOTE:**

Some of the features described in this manual may require additional parts and/or labor, and may not be included as part of the standard installation of this unit. Additionally, many features of this security system have selectable options that must be activated or programmed during the system's installation. These items will be identified in the following sections. Please discuss these features and any questions you may have regarding the installation of this product with Your Authorized Dealer.

### **Remote Transmitters**

### **Remote Transmitter Description**



The **Astra 1000RS** is supplied with one 5-button Remote Transmitter used to control system operations.

Button 1 Locks the doors and when held for 2 seconds, activates the system's Car locator feature.

Button 2 Unlocks the doors.

Button 3 Activates the Auxiliary 1 output. Type of output can be programmed for customization.

Button 4 Activates the Remote Start feature.

*Button 5* is the Page Shift button. Each time the Shift Button is pressed, the LED on the transmitter will illuminate and the transmitter functions will shift to the next page, allowing access to another set of features. Once shifted to another page (there are 4 pages total), the transmitter will remain on that page for 10 seconds or until a button is pressed, then return to page 1. Each time a transmitter button is pressed and held, the LED will flash a number of times to indicate from which page it is transmitting. Under normal operation, only pages 1 and 3 are used. Page 1 is the default page and operates lock, unlock, aux and remote start. Page 3 (press side button 2X) is used for Two Car Operation (see page 3). Other pages and channels may be used in the future.

### Adding/Replacing Transmitters

To replace lost or stolen transmitters or to add additional transmitters into the system, have all desired transmitters ready and follow the steps below.

**Note**: Up to four 1-way transmitters or two 2-way transmitters can be programmed to operate the system. To erase any previously stored transmitter codes, be sure to program all 4 transmitter memory locations.

To program **1-way** transmitter(s):

- 1. Turn the ignition key On, Off, On, Off, and back On.
  - The parking lights will flash 3 times.
- 2. Press and hold the Override switch for 5 seconds.
  - The parking lights will flash 5 times.
  - The LED will illuminate.

- 3. Press Button 1 on the first transmitter.
  - The parking lights will flash once.
- 4. Press Button 1 on the first transmitter again.
  - The parking lights will flash twice to indicate it has learned the code.
- 5. Repeat steps 3 and 4 for each transmitter (up to 4).
- 6. Turn off the ignition key.
  - The parking lights will flash 3 times.

To program **2-way LCD** transmitter(s):

- 1. Turn the ignition key On, Off, On, Off, On, Off and back On .The parking lights will flash 4 times.
- 2. Press and hold the Override switch for 5 seconds. The parking lights will flash 4 times and the LED will illuminate.
- 3. Press Button 1 on the first 2-way transmitter.
- The parking lights will flash twice to indicate it has learned the code.
- 4. Repeat step 3 for a second **2-way** transmitter if applicable (up to 2)

#### **Two Car Operation** (w/1-way transmitters only)

If two vehicles are equipped with Galaxy Starter systems, for convenience both can be operated using the same remote transmitter. If all four transmitters are to be used with both cars, program transmitters A and B into the first vehicle in the manner described above. Program transmitters C and D by pressing the Shift button twice before performing steps 3 and 4 above.

When finished programming the first vehicle, program transmitters C and D into the second vehicle as normal, then program transmitters A and B by pressing the Shift button twice before performing steps 3 and 4 above.

When programmed in this manner, the driver of the first car can also operate the second vehicle by pressing the Shift button twice and the desired function button.

#### **Battery Replacement**

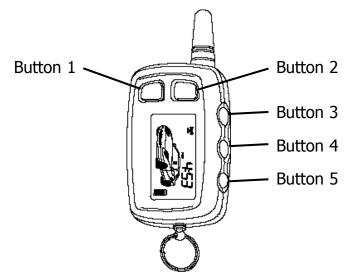
Your Astra Remote Transmitter uses a 12 volt alkaline battery (type 23A), which will require replacement in time. Depending on the amount of use, the battery may last up to six months or more before it needs replacement.

When the battery needs replacing, the system's operating range will decrease or the transmitter LED may not be as bright.

In order to change the battery, first remove 2 screws from the back of the transmitter and separate the top and bottom halves of the case.

While replacing the battery make sure that the positive and negative terminals are positioned correctly, then carefully reassemble the transmitter case.

### **Optional 2-way LCD Remote Transmitter Description**



The **Astra 1000RS** Plus is compatible with the optional 2-way LCD remote transmitter, offering increased range and confirmation of any activated features.

*Button 1* Locks and Unlocks the system and when held for 2 seconds, activates the system's Car locator feature.

Also locks/unlocks the doors when the system is in Valet Mode.

- Button 2 Activates the Remote Start feature.
- Button 3 Activates the Auxiliary 1 output normally used for trunk release (note trunk icon on button).
- Button 4 Always unlocks doors when system is disarmed.
- *Button 5* is the Confirmation and Programming button. Quickly pressing button 5 will activate the LCD display's backlighting for use in the dark. Pressing button 5 for 2 seconds activates the system's confirmation feature which will then display the current status of the system (armed, disarmed, engine running, etc.).

### LCD Transmitter Battery Replacement

Your Galaxy LCD Remote Transmitter uses a 1.5 volt AAA alkaline battery, which will require replacement in time. Depending on the amount of use, the battery may last up to six months before it needs replacement. When the battery needs replacing, the system's operating range will decrease, the LCD display will show only one of three bars in the battery icon, or the display and sounds may suddenly stop and start as the battery voltage drops below minimum.

In order to change the battery, first slide the battery door locking pin to the side. Carefully slide the battery cover downward until it is free. While replacing the battery make sure that the positive and negative terminals are positioned correctly, then carefully reassemble the transmitter case.

### Setting The Time

The LCD display is equipped with a 12-hour clock that in addition to displaying the time, offers an alarm clock function as well as a remote activation timer.

To set the time:

- 1. Press and hold Buttons 2 and 3 for three seconds.
- The remote will beep two times and three bars will be shown indicating time set mode is entered.
- 2. Press Button 2 until the correct hour is displayed.
- 3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.
- 4. When the desired time is displayed, press Button 5 to store.
  - The remote will play a melody to indicate the time has been set.

### Setting The Alarm Clock

The alarm clock function can be set to play an alert melody at a specific time of day.

To set the alarm clock function:

- 1. Press and hold Buttons 2 and 3 until the remote beeps three times.
  - The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.
- 2. Press Button 2 until the desired hour is displayed.
- 3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.
- 4. When the desired time is displayed, press Button 5 to store.
  - The remote will play a melody to indicate the alarm clock has been set.

To disable the alarm clock function:

- 1. Press and hold Buttons 2 and 3 until the remote beeps three times.
  - The alarm clock bell and three bars will be shown indicating alarm clock set mode is entered.
- 2. Press Button 1 to disable the alarm clock.
  - The remote will play a melody to indicate the alarm clock has been disabled.

### Setting The Automatic Start Or Auto Activate Function

The Automatic Start Function provides a timer that allows the vehicle to automatically remote start at a preset time of day. For non-remote start equipped systems, this feature allows activation of an auxiliary feature at a preset time of day.

To set the automatic start / auto activate function:

- 1. Press and hold Buttons 2 and 3 until the remote beeps four times.
  - The fan and clock will be shown indicating automatic start mode is entered.
- 2. Press Button 2 until the desired hour is displayed.
- 3. Press Button 3 until the desired minute is displayed. The button may be held down to scroll faster.

### Visual Indications

. The LCD panel will play a tone if the sounds are enabled or "off" will be displayed if the chirps are disabled.



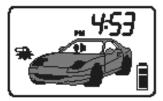
System Armed indicates the doors are locked and the Starter Kill is active.



**Door Open** N/A



System Disarmed indicates the doors are unlocked and the Starter Kill is off.



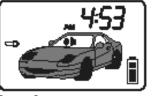
Shock Sensor N/A.



Engine Run indicates the engine is running.



**Trunk Release** Indicates trunk pop.



Warn Away N/A



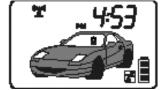
**Trunk Open** N/A



Lock indicates the doors Valet Mode indicates the are locked and the system is in valet mode.



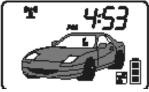
Alarm Clock indicates the programmable timer function has been set.



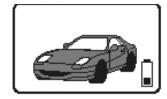
system has been placed into valet mode.



Auto Run indicates the automatic remote start timer has been set.



**Unlock** indicates the doors are unlocked and the system is in valet mode.



Battery Low indicates the battery inside the transmitter needs to be replaced.



Panic indicates the Car Locator feature has been engaged.

### System Operation

### Remote Locking

To Lock the doors:

- 1. Turn off the ignition.
- 2. Press Button 1.
  - The doors will lock.
  - The parking lights will flash once.
  - The LED will turn on red, to indicate the doors are locked.
- 3. 10 seconds after Locking:
  - The LED will start blinking as a theft deterrent and the Starter Kill will activate.

### Remote Unlocking

To Unlock the doors:

Press Button 1 on 2-way transmitter or button 2 on 1-way transmitter.

- The doors will unlock.
- The parking lights will flash twice.
- The LED will turn off and the Starter Kill will deactivate.

### Visual Car Locator Mode

Use this feature to locate your vehicle in a crowded parking lot. Look for the flashing parking lights which should be your vehicle!

To activate the Visual Car Locator Mode:

- 1. Press and hold Button 1 for 3 seconds.
  - The parking lights will flash.
  - The doors will unlock allowing access to the vehicle\*.
- 2. Press Button 2 to turn off Car Finder.
- \* If the ignition is on when the Panic feature is activated, the doors will lock for personal safety.

### Valet Mode

The Valet Mode temporarily disables the remote start system so the vehicle may be serviced by a mechanic. The remote transmitters will continue to lock/unlock the doors, and operate the optional auxiliary functions. To activate or deactivate the Valet Mode:

- 1. Turn on the ignition.
- 2. Press and hold the override switch for 5 seconds.
  - The parking lights will flash once to confirm the Valet Mode is on or twice to confirm Valet Mode is off.
- 3. Turn off the ignition.

### **Remote Start Features**

### Manual/Automatic Transmission Mode

Astara 1000RS is designed to be used in vehicles with automatic or manual transmissions. The unit must be set to automatic or manual mode if used in automatic or manual transmissions vehicles. A wire loop extended out of the unit box determines the mode. Cut the loop to put the unit in the automatic transmission mode. Uncut loop keeps the unit in a manual transmission mode.

#### **Remote Starting Manual Transmission Mode** Normal Mode:

With engine running and Handbrake engaged put the vehicle transmission in neutral and remove the foot from the brake pedal, press remote start button on your transmitter, sidelights will flash twice indicating Manual Start Mode is enabled, turn off the Ignition switch, the engine will remain running. Open and close the door, the system will shut the engine Off. Using the remote Control lock the vehicle doors.

Starter is now ready for remote start operation.

#### Alternate Mode:

With engine running put the vehicle transmission in neutral and remove the foot from the brake pedal, engage the Handbrake, sidelights will flash twice indicating Manual Start Mode is enabled, turn off the Ignition switch, the engine will remain running. Open and close the door, the system will shut the engine Off. Using the remote Control lock the vehicle doors.

Starter is now ready for remote start operation.

## Starter Ready Mode is canceled any time the door is opened; hand brake is released or any other error condition.

To Remote Start the System:

- 1. Be sure the system is not in Valet Mode.
- 2. Press and hold Button 4 on 1-way or Button 2 on 2-way Transmitter for more than 1-second.
  - The parking lights will turn on.
  - The engine will start and run for the duration of its programmed Run Time.\*
  - The heater or air conditioner will turn on (if turned on prior to exiting the vehicle).

\*If the engine fails to start on the first attempt, it will repeat the starting procedure 2 more times. If the vehicle fails to start after a total of 3 times the parking lights will flash 4 times and the doors will lock (if installed).

Turn on the ignition and press the bake pedal to disengage the remote start feature and drive the vehicle.

### Remote Starting Automatic Transmission Mode

To Remote Start the System:

- 1. Be sure the system is not in Valet Mode.
- 2. Press and hold Button 4 on 1-way or Button 2 on 2-way Transmitter for more than 1-second.
  - The parking lights will flash twice.
  - The doors will lock (programmable)
  - The engine will start and run for the duration of its programmed Run Time.
  - The heater or air conditioner will turn on (if turned on prior to exiting the vehicle).

## \*If the engine fails to start on the first attempt, it will repeat the starting procedure 2 more times. If the vehicle fails to start after a total of 3 times the parking lights will flash 4 times and the doors will lock (if installed).

Unlock doors, turn on the ignition and press the bake pedal to disengage the remote start feature and drive the vehicle.

#### Page 8 - Astra 1000RS

### Shut Down

When the the Remote Start feature is active, any of the following actions will shutdown the engine:

- 1. Pressing Button 4 on 1-Way or Button 2 on 2-Way Transmitter.
  - After the engine shuts down the doors will lock (programmable)
- 2. Pressing the Brake Pedal.
- 3. Opening the Hood.
- 4. Remote Start Time-Out (completion of the timed run cycle).

#### **Quick Stop** (Automatic Transmission Only)

The Quick Stop Feature allows you to exit the vehicle while keeping the engine running for quick stops. To leave the vehicle running:

- 1. Press Button 4 on 1-way or Button 2 on 2-way Transmitter while engine is running with key.
- 2. The parking lights will turn on. Now turn the ignition key off and the vehicle will continue to run.

3. You may now exit the vehicle and lock the doors manually or by using the Remote Transmitter. To resume control of the vehicle:

- 1. Unlock the doors manually or with the Transmitter.
- 2. Turn on the ignition.
- 3. Press the Brake Pedal to disengage the remote start.

\*If optional keyless entry feature is installed.

#### Automatic Start Mode

#### \*Automatic Start Mode must be enabled to activate this feature.

The Automatic Start Mode allows the vehicle to automatically start the vehicle, for a duration of 24 hour cycle, every one or two hours and run for the preset Run Time.

To turn on Auto Cold Starting:

1. Ignition switch Off.

2. Press the Button 4 of the LCD transmitter or press the shift key and then \* button on the one-way transmitter.

• The parking lights will flash 4 times.

To turn off Auto Cold Starting do one of the following:

- Turn on the ignition.
- · Disarm the Alarm.

### **Extended Features**

### **Ignition Door Locking**

For added safety, the Ignition Door Locking feature allows vehicles equipped with power door lock systems to automatically lock the doors when the ignition is turned on. If a door is open when the ignition is turned on, the Ignition Door Locking feature is disabled to protect against locking the keys inside the vehicle.

#### **Ignition Door Unlocking**

For added convenience, this feature automatically unlocks the doors after the ignition key is turned off. The Ignition Door Unlocking feature may also be completely disabled if desired.

#### **Auxiliary Function Output**

The Galaxy Starter system is equipped with an Auxiliary Channel Output which may be used for a variety of functions including trunk pop, headlights on, window roll up/down, etc. The output can be programmed to be active for as long as you hold the transmitter button, for 10 seconds or it can turn on permanently until you press the button again.

#### **Turbo Timer Feature**

The optional Turbo Timer feature allows vehicles with turbocharged engines to remain running after the ignition key is removed, for proper cool-down of the turbocharger. The Turbo Timer feature requires connection to the vehicle's parking brake wire and is compatible with most gasoline powered engines, and diesel engines where a glow plug connection is not required.

To activate the Turbo Timer feature:

- 1. Leave the engine running after parking the vehicle.
- 2. Set the vehicle's parking brake.
  - The Turbo Timer will begin a two-minute run cycle to allow the turbocharger to cool down.
- 3. Turn OFF the ignition and exit the vehicle without pressing the brake.

To deactivate the Turbo Timer feature:

- 1. Turn OFF the ignition.
- 2. Press the brake pedal.
  - The Turbo Timer countdown will automatically stop and the engine will shutdown.

**WARNING**: the Turbo Timer feature is not intended for use inside garages or other non-ventilated areas. Make sure to deactivate the Turbo Timer feature when parking in such areas.

#### "Call " Feature

The call feature sends a ring to the LCD transmitter. Activate this feature with ignition switch in off position and by pressing the valet switch momentarily.

### System Installation

- 1. Thoroughly read and become familiar with the installation instructions before beginning the installation.
- 2. Review system contents:

Main Unit One 1-way and one 2-way Transmitters

Harnesses

- 16-Pin main harness 3-Pin door lock harness
- 2-Pin LED harness 2-Pin Override Switch harness
- 3. Verify vehicle is equipped with electronic fuel injection, and starts/idles normally before installation.
- 4. Determine if vehicle is equipped with a factory theft deterrent system and obtain proper bypass module if required.
- 5. Find a location to mount the hood pin switch that will not interfere with the opening of the hood, and is not in a position that can accumulate water. The hood pin is a safety device that must be installed to avoid remote starting during engine servicing.
- 6. Verify with the owner, mounting locations for all visible components, including the LED and Valet switch.
- 7. Verify with the owner, the optional features of the Galaxy Starter and the features that must be programmed during installation.
- 8. Inspect and perform a function test of all vehicle systems before and after the installation.
- 9. Always use a Volt / Ohm meter for testing vehicle circuits. Never use a test light.
- 10. Always look before drilling any holes or mounting self-tapping screws. Be sure fuel lines and exterior wiring looms are clear as they are often close to the chassis and difficult to see.
- 11. Protect all wires running from the engine compartment to the interior of the vehicle by covering with electrical tape and split loom tubing. Be sure to use a grommet when routing wires through the firewall.
- 12. Properly fuse any additional accessories such as window modules, door lock actuators, etc., making sure to power them separate from the alarm module. This will ensure the functionality of the security system in the event of an accessory failure.

### Mounting the Control Unit

The control unit must only be mounted in the interior of the vehicle. Do not mount the main unit in the engine compartment. Choose a mounting location that will not be easily accessible to a thief, and will not interfere with the operation of any vehicle components such as foot pedals, steering column, air vents, seat rails, etc.

Do not mount the control unit until after setting the internal jumpers and performing a complete operation check of the system. After installation is complete and performance verified, the control unit can be easily mounted using wire ties through the mounting tabs on the bottom of the unit.

System Wiring

### 5-Pin Harness

- Pin 1 **ORANGE WIRE:** Accessory Output for heater/air conditioner(negative) to activate external relay
- Pin 2 **YELLOW WIRE**: Ignition 1 output (negative) to activate external relay.
- Pin 3 **VIOLET WIRE**: Starter Output (negative) to activate external relay
- pin 4 **BROWN WIRE**: Ignition 2 output (negative) to activate external relay.
- pin 5 **RED WIRE**: +12V Power to external relays.

### 16-Pin Main Harness

- Pin 1 **BLUE WIRE** 1 pulse remote start (-) input. Connect to auxiliary output from aftermarket alarm.
- Pin 2 **BLACK/GRAY WIRE**: Tach Input. (required for all manual transmission installations) Connect to the vehicle's tach wire or a fuel injector wire if the tachless mode does not provide satisfactory operation.
- Pin 3 **WHITE/RED WIRE**: Parking Brake Input (-). This wire must be connected to the parking brake wire. For vehicles with a negative parking brake wire, a relay must be used to invert the polarity.
- Pin 4 **GREEN WIRE**: Negative Door Input (-). Connect to the door switch circuit wire that shows ground when the door is open.
- Pin 5 **VIOLET WIRE**: Positive Door Input (+). Connect to the door switch circuit wire that shows +12V when the door is open. This type of door circuit is usually found on Ford vehicles.
- Pin 6 **YELLOW WIRE**: +12V Ignition Input. The Yellow wire must connect to a main ignition wire at the ignition harness. This wire must show +12V when the ignition is on and while cranking the starter. The voltage must not drop when the car is starting.
- Pin 7 **WHITE/BLACK WIRE**: Hood Pin Input (-). Connect the to the hood pin switch. The switch must provide a ground output when switch is opened.
- Pin 8 **BLACK WIRE**: Ground Input (-). The Black wire must connect to a solid chassis ground. Clean away any paint or dirt to insure the best possible ground.
- Pin 9 **VIOLET/WHITE WIRE**: Factory Rearm Output (-) 500 mA. The White/violet wire provides a ground output on remote start shutdown to rearm a factory security system. Connect to the wire that requires a ground pulse to rearm the factory security system.
- Pin 10 **WHITE/VIOLET WIRE**: Factory Disarm Output (-) 500 mA. The Violet/white wire provides a ground output on disarming and before remote starting to disarm a factory security system. Connect to the wire that requires a ground pulse to disarm the factory security system.
- Pin 11 **BLUE/ORANGE WIRE**: Ground When Running Output (-) 500 mA. Connect to an optional factory security bypass module if required.
- Pin 12 **ORANGE WIRE**: Anti-Grind Output (-) 500 mA. The Orange wire provides a ground output to activate a relay for anti-grind protection.
- Pin 13 **GRAY WIRE**: Auxiliary 1 Output (-) 500 mA. Connect to a relay for an optional feature such as trunk release, etc. This output may be programmed for momentary, timed, or latched operation.
- Pin 14 **GREEN/WHITE WIRE**: Brake Input (+). Connect to the wire that shows +12V when pressing the brake. The Green/white wire is a safety shutdown wire that must be connected.
- Pin 15 **WHITE WIRE**: Parking Light Output (+/-) relay. Connect the White wire to the circuit that shows +12V or ground only when the parking lights are on and set the internal parking light relay jumper to the proper polarity. For parking light circuits exceeding 10 amps, a relay is required. For vehicle's with

#### Page 12 - Astra 1000RS

independent left and right parking light circuits, diodes must be installed to keep the circuits separate. NOTE: Do not connect the WHITE wire to the vehicle's headlight circuit.

Pin 16 **RED WIRE**: Module Power Input (+). Connect to a constant source of +12V.

**2-Pin Blue Connector:** Valet switch port. Mount switch where it is accessible from the driver's position.

**2-Pin Red Connector:** LED port. Mount LED where it may be easily seen from either side of the vehicle.

**3-Pin White Door Lock Connector:** Door lock port.

- BLUE WIRE negative unlock output (-) 500mA.
- · RED WIRE (+) 100mA trigger output for optional plug-in door lock relay module,
- · GREEN WIRE negative lock output (-) 500mA.

**5-Pin White Flat Connector:** Antenna connector port.

#### **Starter Diagnostics**

Starter doesn't start and Side Lights flash:

- 3 Times Hood Trigger is active
- 4 Times Brake Lights stay On
- 5 Times Unit is in Valet (service) mode, and start is disabled.
- 6 Times Handbrake Off (manual transmission Mode Only).
- 7 Times Start sequence not initiated (manual transmission Mode Only).

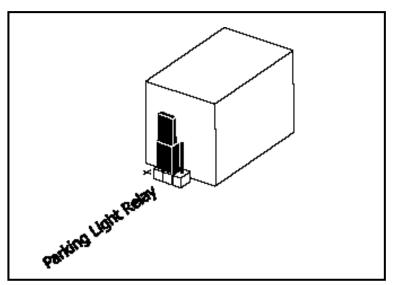
### **Jumper Settings**

### Jumper Selection

Carefully separate the top and bottom halves of the main unit case. Once the cover is removed, the parking light polarity jumper will be visible next to the parking light relay. Set the jumper for the correct polarity output as described below, then reassembly the main unit case.

Parking Light Output. Selects the polarity (+/-) for the output of the on-board Parking Light relay.

Left Pin + Center Pin = positive Right Pin + Center Pin = negative



default setting shown

### System Programming

### Entering System Programming

To enter System Programming:

- 1. Turn on ignition.
- 2. Within 5 seconds, press the valet switch 5 times.
  - The parking lights will flash three (3) times indicating you have entered Programming.
- 3. Press the valet switch the number times equal to the System Parameter you want to change.
  - The parking lights will flash each time the valet switch is pressed.
- 4. Within 5 seconds, press the transmitter button corresponding to the desired operating mode for that System Parameter.
  - The parking lights will flash to indicate the setting.
    - 1 flash = Button 1
    - 2 flashes = Button 2
    - 3 flashes = Button 3
- 5. When you are finished, turn off the ignition to save the changes.

### Default Reset

Following this procedure will set all System Programming Parameters to factory default settings.

- 1. Enter System Programming.
- 2. Press Transmitter Button 3.
  - The parking lights will flash 6 times indicating that the reset signal was received.
  - All System Programming parameters are now set to factory default settings.
  - The Valet Mode is off.
- 3. Turn off ignition.

### Programmable System Options

The following is a description of the programming options of the system. Some of the program branches control more than one option, and may require accessing a particular branch number twice in order to program all desired features.

- 1. **Ignition Door Locking.** Selects whether or not the system will automatically lock the doors 5 seconds after the ignition key is turned on.
- 2. **Ignition Door Unlocking.** Selects whether or not the system automatically unlocks the doors when the ignition is turned off.
- 3. **Door Unlock Pulse.** Selects between one pulse or two pulse operation for the door unlock output. Many new import vehicles' factory door locking systems require two pulses on the proper wire to unlock the doors. These systems can be interfaced directly without the use of relays or any additional circuitry by programming the system for double unlock pulse.
- 4. **Door Lock Pulse Length.** Selects between a 1, 3 and 0.1 second output for door locking and unlocking. Program to 3 seconds for vehicles equipped with vacuum door locking systems.
- 5. Aux 1 Mode. Selects from momentary, 10 second timed, or latched operation for Auxiliary 1.

Momentary operation provides an output for as long as the transmitter button is pressed.

Timed operation provides an output that turns on for 10 seconds each time the transmitter button is pressed. If the button is pressed again during the 10 seconds, the output will turn off.

Latched operation provides an output that turns on when the transmitter button is pressed and remains on until the transmitter button is pressed again.

- 6. **Unlock with Aux 1.** Selects whether the doors should unlock when you press the trunk button.
- 7. **Start in Valet Mode.** Selects if vehicle should start when in Valet.
- 8. Lock after Start. Selects if doors should lock upon Remote Start.
- 9. Lock after Shutdown. Selects if doors should lock when Remote Start Aborts.
- 10. Engine Run Time. Selects between 15 or 25 minutes for the remote start run cycle.
- 11. Automatic Start Mode. Select to automatically start vehicle every 1 or 2 hours.
- 12. **Tachless Sense Crank Time.** Selecting engine crank time automatically selects the tachless mode and one of three crank times.

If the normal engine crank time is too short increase the time by selecting one of the two additional extended crank time options.

Normal - 0.8Sec.

Extended - 1.0Sec.

Super Extended - 1.4Sec.

<u>Tachless Mode.</u> Determines the engine status using an advanced software routine, without requiring connection to the vehicle's tachometer. Tachless operation may not be compatible with some vehicles or in severe temperatures, in which case the tach wire must be connected.

13. **Remote Start Program**. This dual program branch sets the engine mode for Gas or Diesel, and learns the vehicle's RPM threshold. Learning the RPM threshold automatically selects the RPM monitor mode. For installation into a diesel equipped vehicle, first set the engine type to diesel before learning RPM.

<u>Tach Monitor Mode.</u> Monitors the vehicle's tach wire (or a fuel injection wire) in real-time to determine engine status and adjust starter crank time automatically. If programmed for Tach Monitor, the vehicle's tach signal will have to be learned before initial operation (see below).

<u>RPM Learn.</u> Start the engine, enter Branch 21 and press Button 1 to learn the vehicle's tach signal. The siren will chirp and the LED will flash once to confirm learning of the tach signal and entering Tach Monitor Mode. The siren will chirp four times and the LED will flash four times if the tach signal was not learned, engine sense mode will not be changed.

Gas Engine. Sets the engine type for Gasoline.

<u>Diesel Engine</u>. Sets the engine type for Diesel and monitors the glow plug input to make sure the glow plugs are warm before cranking the starter. If the glow plug wire is not connected, the built-in timer waits 15 seconds before automatically cranking the starter.

- 14. **Ignition 2 Relay Program.** Selects one of three operating modes for the Ignition 2 relay output: Ignition 2, Accessory 2, or Starter 2.
- 15. **Turbo/Manual Transmission Start. Turbo Mode -** When enabled allows you to leave the vehicle while the engine is still running (2 Minutes) in order to cool down the turbo. A connection to the parking brake is required for this feature. **Manual Transmission Ulternate Start Mode** When enabled starts the remote start activation process automaticaly when the immergency brake is ingaged.

#### Page 16 - Astra 1000RS

Branch Feature	Button 1 (default)	Button 2	Button 3
1. Ignition Door Locking	On	Off	
2. Ignition Door Unlocking	Unlock All	Unlock Driver Only	Off
3. Door Unlock Pulse	Single	Double	
4. Door Lock Pulse Length	1 second	3 seconds	0.1 Sec
5. Aux 1 Mode	Pulsed	Timed (10Sec.)	Latched
6. Unlock with Aux 1	Disabled	Enabled	
7. Start in Valet Mode	Disabled	Enabled	
8. Lock after Start	On	Off	
9. Lock after Shutdown	On	Off	
10. Engine Run Time	15 minutes	25 minutes	
11. Automatic Start Mode	Disabled	2 hours	1 hour
12. Tachless Sense Crank Time	Normal	Extended	Super Extended
13. Engine Type	RPM Mode/RPM Learn	Gas Engine	Diesel Engine
14. Ignition 2 Output Program	Ignition 2 Output	Accessory 2 Output	Starter 2 Output
15. Turbo/Manual Transmission Start	All Disabled	Turbo Mode Enabled	Ulternate Start Enabled
16. Unlock Before Start	Disabled	Enabled	
17. Rearm/Horn Output Mode	Rearm	Horn	Horn Chirp disabled
18. Smart Start Run Monitor	Enabled	Disabled	

\*Automatic Transmission Only

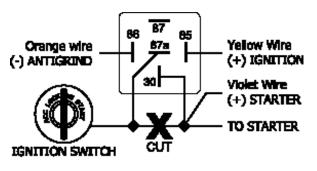
16. Unlock Before Start. When enabled doors unlock before engine remote starts.

17. **Rearm/Horn Output Mode.** Pin 9 VIOLET/WHITE wire is selected to act as a Factory Rearm output or Horn Output Horn output with chirps enabled or Horn output with chirps Disabled

18. **Smart Start Run Monitor.** When enabled smart mode monitors engine run condition during remote start.

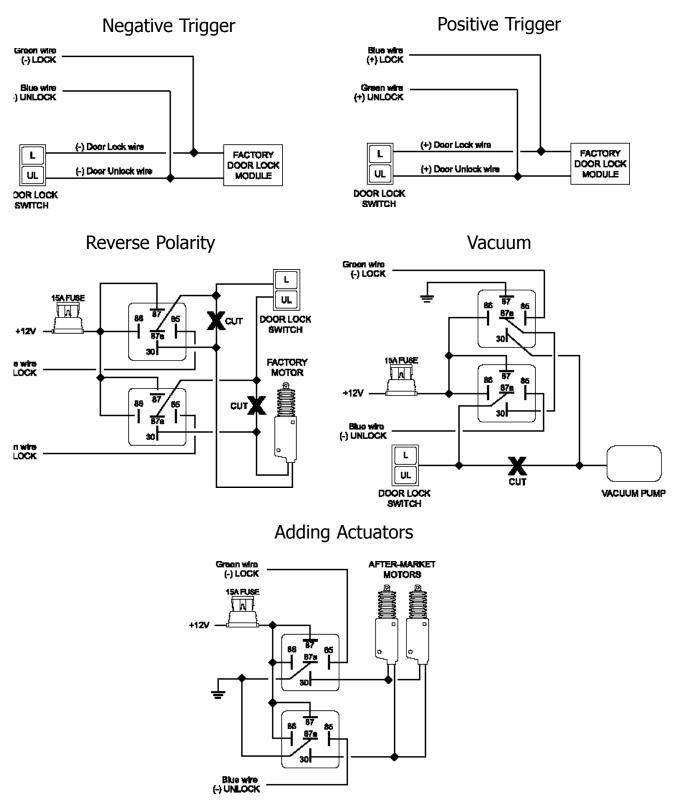
### Wiring Diagrams

Starter Anti-Grind



### Door Lock Diagrams

Follow the diagrams below for connecting basic door lock systems. For Two Stage door lock systems (separately unlocks driver and passenger doors) see following pages.

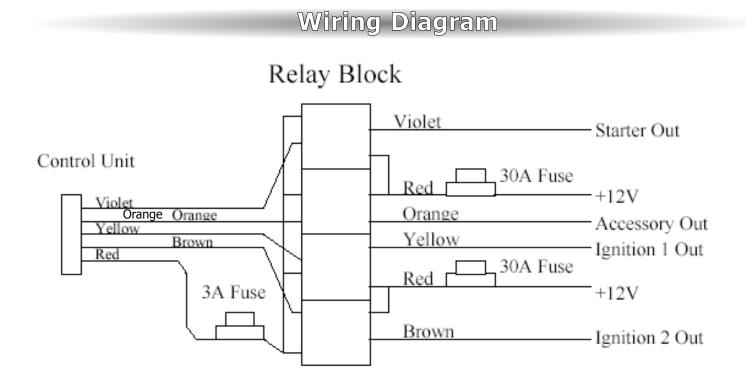


### **Technical Information**

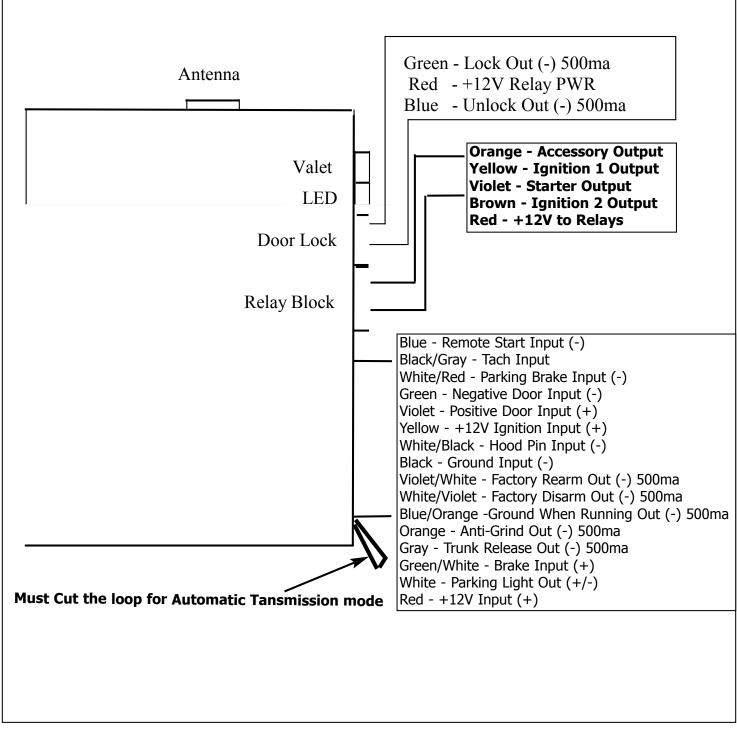
#### FCC ID: OARRXAM2000

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation



### Wiring Diagram



### ScyTek Electronics

11627 Cantara Street Unit B North Hollywood, CA 91605